

# MettL7B Antibody

Catalog # ASC10796

## Product Information

<b>Application</b>	WB, E, IHC-P
<b>Primary Accession</b>	<a href="#">Q6UX53</a>
<b>Other Accession</b>	<a href="#">NP_689850</a> , <a href="#">164663805</a>
<b>Reactivity</b>	Human, Mouse, Rat
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG
<b>Calculated MW</b>	27775
<b>Concentration (mg/ml)</b>	1 mg/mL
<b>Conjugate</b>	Unconjugated
<b>Application Notes</b>	MettL7B antibody can be used for detection of Mettl7B by Western blot at 2 - 4 $\mu$ g/mL. Antibody can also be used for immunohistochemistry starting at 2.5 $\mu$ g/mL.

## Additional Information

<b>Gene ID</b>	196410
<b>Other Names</b>	Methyltransferase-like protein 7B, 2.1.1.-, METTL7B
<b>Target/Specificity</b>	METTL7B; This Mettl7B antibody is predicted to not cross-react with Mettl7A.
<b>Reconstitution &amp; Storage</b>	MettL7B antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
<b>Precautions</b>	MettL7B Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

<b>Name</b>	TMT1B {ECO:0000303   PubMed:37137720, ECO:0000312   HGNC:HGNC:28276}
<b>Function</b>	Thiol S-methyltransferase that catalyzes the transfer of a methyl group from S-adenosyl-L-methionine to alkyl and phenolic thiol- containing acceptor substrates. Together with TMT1B accounts for most of S-thiol methylation activity in the endoplasmic reticulum of hepatocytes. Selectively methylates S-centered nucleophiles from metabolites such as hydrogen sulfide and dithiothreitol.
<b>Cellular Location</b>	Endoplasmic reticulum membrane {ECO:0000250   UniProtKB:Q562C4}; Peripheral membrane protein {ECO:0000250   UniProtKB:Q562C4}. Lipid

droplet {ECO:0000250|UniProtKB:Q562C4}. Microsome. Cytoplasm, cytosol. Note=Highly concentrated in the perinuclear area of the endoplasmic reticulum (ER) and surrounding lipid droplets. May be associated with the specific regions of the LR that form lipid droplets and targeted to the initial deposits of lipids where the lipid droplets form. {ECO:0000250|UniProtKB:Q562C4}

#### Tissue Location

Expressed in the liver.

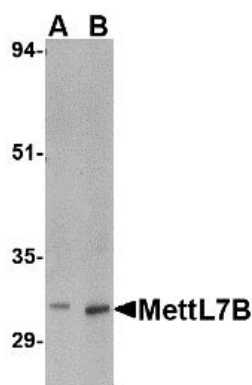
## Background

MettL7B Antibody: MettL7B belongs to the methyltransferase superfamily. It is a probable methyltransferase. Methyltransferase is a type of transferase enzyme which transfers a methyl group from a donor to an acceptor. Often methylation occurs on nucleic bases in DNA or amino acids in protein structures. DNA methylation is often utilized to silence and regulate genes without changing the original DNA sequence. DNA methylation may be necessary for normal growth from embryonic stages in mammals. When mutant embryonic stem cells lacking the murine DNA methyltransferase gene were introduced to a germline of mice they caused a recessive lethal phenotype. Methylation may also be linked to cancer development as methylation of tumor suppressor genes promotes tumorigenesis and metastasis.

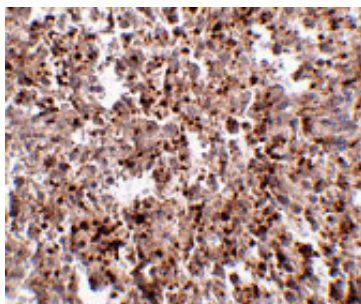
## References

- Clark HF, Gurney AL, Abaya E, et al. The secreted protein discovery initiative (SPDI), a large-scale effort to identify novel human secreted and transmembrane proteins: a bioinformatics assessment. *Genome Res.*2003; 13:2265-70.
- Li E, Bestor TH, and Jaenisch R. Targeted mutation of the DNA methyltransferase gene results in embryonic lethality. *Cell*1992; 69:915-26.
- Laird PW and Jaenisch R. DNA Methylation and Cancer. *Human Molecular Genetics*1994; 3:1487-95.

## Images



Western blot analysis of MettL7B in rat spleen tissue lysate with MettL7B antibody at (A) 2 and (B) 4 µg/mL.



Immunohistochemistry of Mett7LB in human spleen tissue with MettL7B antibody at 2.5 µg/mL.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.